We claim:

1. A system, comprising:

an engine having a compression ratio that can be adjusted during engine operation;

an actuation unit coupled to said engine for adjusting said compression ratio during engine operation;

a torque transmitting unit having at least a first and second torque transmission path coupled to said engine, with said at least two torque transmission paths having a clutch that affects torque of said respective path; and

a control unit for controlling said torque transmitting unit and said actuation unit, said controller providing an indication of an engine torque output disturbance caused by adjustment of said actuation unit, and adjusting a clutch parameter of at least one of the first and second clutches based on an said engine torque output disturbance to reduce effects of said engine torque output disturbance on a vehicle drive torque.

2. The system of claim 1 wherein said actuation unit adjusts a length of a connecting rod of the engine.

3. The system of claim 1 wherein said torque transmitting unit is an automatic transmission.

4. The system of claim 3 further comprising a torque converter.

5. A system, comprising:

an engine having a compression ratio that can be adjusted during engine operation; an actuation unit coupled to said engine for adjusting said compression ratio during engine operation;

a torque transmitting unit having at least a first and second torque transmission path coupled to said engine, with said at least two torque transmission paths having a clutch that affects torque of said respective path; and

a control unit for controlling said torque transmitting unit and said actuation unit, said controller providing an indication of an engine torque output disturbance caused by adjustment of said actuation unit, and adjusting a clutch pressure of at least one of the first and second clutches based on an said engine torque output disturbance so that a vehicle drive torque is substantially unaffected by said torque disturbance.

6. The system of claim 5 wherein said actuation unit adjusts a length of a connecting rod of the engine.

7. The system of claim 6 wherein said torque transmitting unit is an automatic transmission.

8. The system of claim 7 further comprising a torque converter.

9. A method for controlling output of a vehicle powertrain having an engine with a variable compression ratio mechanism and a torque transmitting unit with multiple transmission paths including multiple clutches, the vehicle also having a electronic control unit, the method comprising:

determining whether compression ratio of the engine should be adjusted; and

in response to adjusting said compression ratio based on said determination, transmitting torque through said torque transmitting unit via at least two paths, and adjusting a clutch parameter of at least one of the clutches of said torque transmitting unit to reduce an engine output disturbance cause by said adjusting of said compression ratio.

10. The method of claim 9 wherein said determination of whether compression ratio of the engine should be adjusted is based on operating conditions.

11. The method of claim 10 wherein said transmitting torque through torque transmitting unit via at least two paths reduced engine output.

12. The method of claim 11 wherein said clutch parameter is a hydraulic clutch pressure.

13. The method of claim 11 wherein said adjusting of said clutch parameter is based on an estimate of engine output torque increase.

14. The method of claim 9 further comprising selecting said at least two paths based on engine operating conditions.

15. The method of claim 9 further comprising selecting said at least two paths based on engine fuel economy.

16. The method of claim 9 wherein said adjusting of said compression ratio adjusts compression ratio between a low compression ratio and a high compression ratio.